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EXPERIMENT STATES

# RESEARCH IN HOME ECONOMICS

at the

LAND-GRANT INSTITUTIONS

1938-1939

Compiled by

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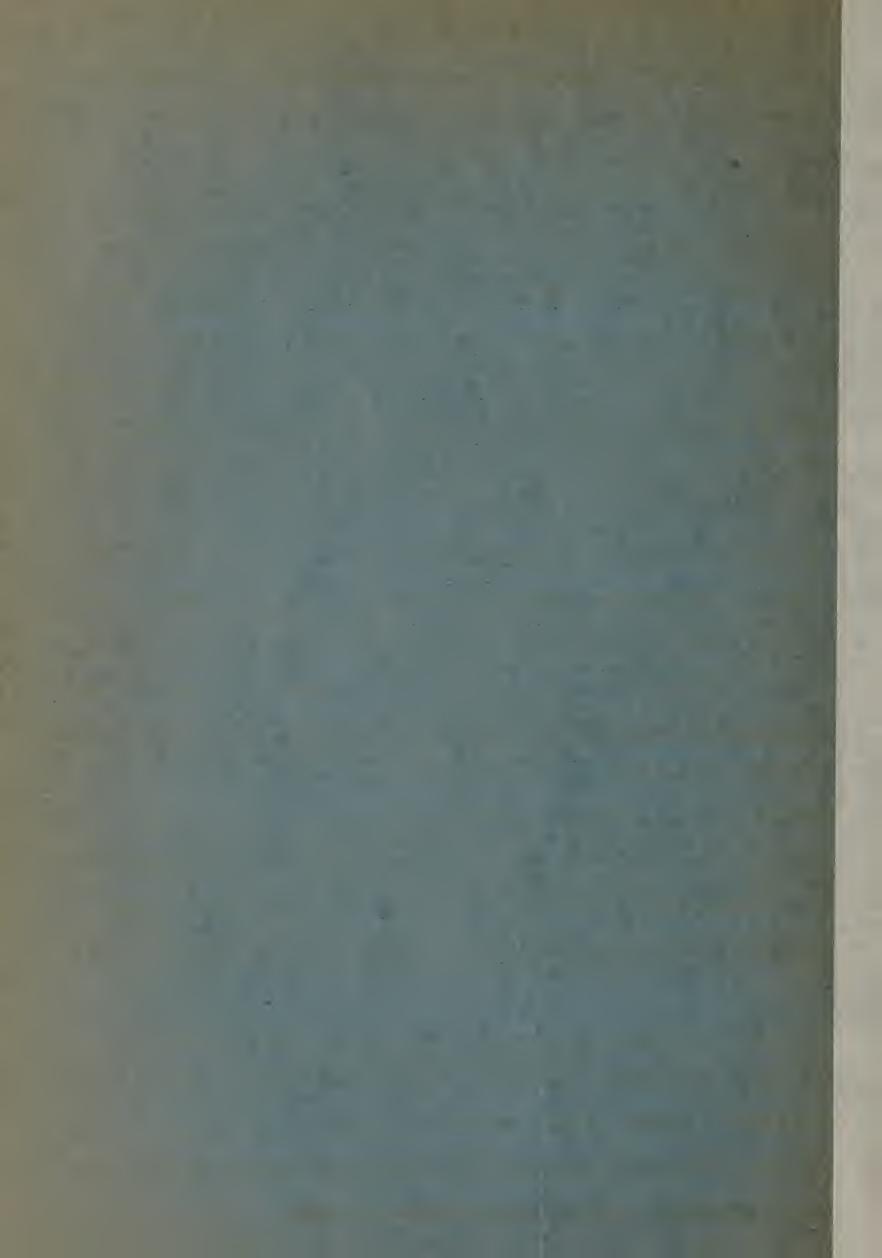
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# EXPLANATORY NOTE

This compilation of information on the present status of research in Home Economics at Land-Grant Institutions attempts to cover research in progress as of November 1, 1938, and publications from November 1, 1937, to November 1, 1938. The lists are limited for the most part to research conducted in home economics departments. Although it is recognized that research of value to one or another of the various subject matter divisions of home economics is being conducted in other departments of the Land-Grant Institutions, space limitations prevent the inclusion of such research except as it is of cooperative nature with home economics, or is being conducted especially for home economics in institutions where there is little or no research in the home economics department.

In section I research in progress is indicated by project title, date of approval by the Office of Experiment Stations, U.S.D.A., if the project is supported in part or as a whole by Federal funds, names of project leaders and research workers, and sources of financial support. The terms Purnell, Adams, Hatch, and Bankhead-Jones refer to Federal funds provided for research at the State agricultural experiment stations under these Congressional Acts. Brackets are used to indicate the departments other than Home Economics either cooperating in the research, in which case only the names of the cooperating research workers and departments are bracketed, or entirely responsible for the research, in which case the project titles are also included within the brackets.

In section II, covering the publications of the year, precedence is given to State agricultural experiment station publications. Many of these are available on request from the station in question. References to journal articles are given in the form used in the Experiment Station Record, which publishes abstracts of most of the publications listed.

## ALABAMA

I.

[Studies of the vitamin B complex, 6/16/27, W. D. Salmon and G. A. Schrader, Animal Husbandry] (Purnell).

[Pathological conditions associated with a lack of the vitamin B complex, 6/16/27, W. D. Salmon and J. L. West, Animal Husbandry] (Adams). [A study of quality in cowpeas and soybeans for human food, 12/6/35, W. D. Salmon and W. C. Sherman (Bankhead-Jones)].

# II.

Progress reports in Alabama Sta. Rpt. 1934-35, pp. 15-17; 1936, pp. 18-23.

The effect of certain oils in alleviating localized erythematous dermatitis (acrodynia or vitamin  $B_6$  deficiency) in rats, W. D. Salmon. Abs. in Jour. Biol. Chem., 123 (1938), pp. CIV-CV.

The influence of the diet and energy intake upon acute vitamin B<sub>1</sub> deficiency in the rat, G. A. Schrader and C. O. Prickett. Jour. Wutr., 15 (1938), pp. 607-620.

# ARIZONA

I.

The relation of fluorine to "mottled enamel" endemic in certain Arizona communities, 7/10/31, M. C. Smith and M. Varich (Purnell).

The availability for hemoglobin formation of iron and copper in certain dried fruits and the effect of the sulfuring process thereupon, 10/28/35, M. C. Smith, L. Otis, and H. Spector (Purnell).

The vitamin content of certain foodstuffs, including the effect of cooking and comparison of chemical and biological methods of assay, 10/28/35, M. C. Smith and L. Otis (Purnell).

#### TI.

Progress report in the Arizona Sta. Rpt. 1937, pp. 10, 11, 65-71.
Bone contact removes fluorine, H. V. Smith and M. C. Smith. Waterworks Engin., Nov. 10, 1937.

The vitamin A value of blue grama range grass at different stages of growth, M. C. Smith and E. B. Stanley. Jour. Agr. Res. [U. S.], 56 (1938), pp. 69-72.

The ability of the dog to utilize vitamin A from plant and animal sources, D. Bradford and M. C. Smith. Amer. Jour. Physiol., 124 (1938), pp. 168-173.

# ARKANSAS

I.

An analysis of a few of the staple cotton materials used extensively for children's clothing, 5/1/34, O. Smenner (Purnell).

An analysis of clothing inventories of the rural families of Arkansas 4/4/38, O. Smenner (State).

Health services and costs in certain rural areas of Arkansas, 4/4/36,

I. C. Wilson and [W. H. Metzler, Rural Sociology] (Purnell).

Marketing of products of home industries in Arkansas, 4/23/36, I. C. Wilson and [O. J. Hall, Rural Sociology] (Bankhead-Jones).

Analysis of farm home accounts, I. C. Wilson (State).

Costs, use and trends in raral electrification, 12/6/37, I. C. Wilson and [D. G. Carter, Agricultural Engineering, and O. J. Hall, Rural Economics and Sociology (State).

A study of the chemical and physical characteristics of Arkansas peaches in relation to quality in the canned product, 8/25/38, H. Reynolds and [J. R. Cooper, Horticulture] (Purnell).

A study of the chemical properties of Arkansas grapes, 8/25/38, H. Reynolds and [J. E. Vaile, Horticulture and Forestry] (Bankhead-Jones).

Factors affecting the preservation of vitamin C in tomato juice processed in glass and tin containers, 6/2/38, H. Reynolds (Bankhead-Jones).

II.

Progress report in Arkansas Sta. Bul. 351 (1938), pp. 46-51. Sickness and medical care in an Ozark area in Arkansas, I. C. Wilson and W. H. Metzler. Arkansas Sta. Bul. 353 (1938), pp. 39.

#### CALIFORNIA

I.

The effect of lactose on calcium metabolism of rats, C. A. Handley (Departmental).

The anti-greying factor of the vitamin B2 complex, H. D. Simms and A. F. Morgan (Departmental).

The effect of vitamin B2 deficiencies on organs and tissues of rats, B. B. Cook (Departmental).

The nature of the damage to lysine in heated casein, A. F. Morgan (Denartmental).

Hypervitaminosis D in dogs, rats and guinea pigs as affected by vitamin A, A. F. Morgan, J. Hendricks, E. Orr, N. Shimotori and O. M. Neilson (Departmental).

The nature of the factor auxiliary to ascorbic acid in fruit juices, A. F. Horgan and R. Eichar (Departmental).

Effect of diets high in cholestorol on tissues of rats in middle and old age, R. Okey (Departmental).

Effects of cholesterol feeding at varying levels of vitamin intake on blood and tissues of guinea pigs, R. Okey and V. Greaves (Departmental).

Stabilizers in unstirred ices and sherbets, B. M. Watts and L. Bentley (Departmental). 7 2 - 7 - 1

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# CALIFORNIA (Cont.)

I.

Studies on the utilization of soybean products, B. M. Watts, J. Spencer, and E. Adachi (Departmental).

Whipping and utilization of dried egg whites and skim milk, B. M.

Watts, C. Elliott, and D. Ulrich (Departmental).

Studies of the composition and preparation of food products, L. C. Struve, M. L. Maxwell, and E. L. Blanchard (State).

Metabolic studies on humans. -- I, Vitamin A requirement of young adults, E. L. Blanchard, L. C. Struve, and M. L. Maxwell (State).

#### II.

The effect of amino-acid supplements and of variations in temperature and duration of heating upon the biological value of heated casein, E. O. Greaves, A. F. Morgan, and M. K. Loveen. Jour. Nutr., 16 (1938), pp. 115-128

Nutrition in pregnancy, A. F. Morgan. Pub. Health Nursing, 30 (1938), pp. 576-583.

Vitamin B<sub>2</sub> deficiencies as affected by dietary carbohydrate, A. F. Morgan, B. B. Cook, and H. G. Davison. Jour. Nutr., 15 (1938), pp. 27-43.

The effect of pregnancy and lactation on the cholesterol and fatty acids in rat tissues, R. Okey, L. S. Godfrey, and F. Gillum. Jour. Biol. Chem., 124 (1938), pp. 489-499.

The effect of the vitamin need of the experimental animal on response to cholesterol feeding, R. Okey. Internatl. Physiol. Cong., Zurich, Proc., 16 (1938).

# COLORADO

I.

The baking of flour mixtures at high altitudes.—II, Physicochemical factors, rev. 8/15/32, I. M. K. Allison and W. E. Pyke (Purnell and State).

A study of factors affecting the culinary quality of potatoes, 11/5/34, W. E. Pyke (Purnell).

# II.

Progress report in Colorado Sta. Rpt. 1937, pp. 32, 33.

The effect of the temperature of coagulation on the physical properties of coagulated egg white, M. A. Barmore. Abs. in Jour. Colo.-Wyo. Acad. Sci., 2 (1937), p. 16.

The sloughing of potatoes, M. A. Barmore. Amer. Potato Jour., 15 (1938), pp. 170, 171.

# CONNECTICUT (Storrs)

II.

The vitamin C content of Connecticut home canned tomatoes, E. C. Rogers and D. B. Mathews. Jour. Home Econ., 30 (1938), pp. 114-116.

#### FLORIDA

I.

The chemical composition and nutritive value of several Florida honeys, 9/28/36, O. D. Abbott (Purnell).

Standardization of home canned tomatoes and tomato juice, 9/28/36, 0. D. Abbott (Purnell).

An investigation of human dietary deficiency in selected counties of Florida, with special reference to nutritional anemia in relation to the composition of home-grown foods, rev. 9/13/38, O. D. Abbott and R. Overstreet (Purnell).

#### II.

Progress report in Florida Sta. Rpt. 1937, pp. 68, 75-77.

Effect of a lack of vitamin A on the blood picture of rats and adult humans, O. D. Abbott and C. F. Ahmann. Fla. Acad. Sci. Proc., 1 (1937), p. 149.

Effect of avitaminosis A on the blood picture of albino rats, O. D. Abbott and C. F. Ahmann. Amer. Jour. Physiol., 122 (1938), pp. 589-595.

# GEORGIA

Ι.

The ascorbic acid content of southern grown fruits and vegetables, 9/4/35, L. Ascham and [H. L. Cochran, Horticulture] (Purnell).

Dark adaptation in school children, 4/5/37, L. Ascham (Purnell).

Available iron and available calcium in pasture plants, rev. 6/15/37, L. Ascham, M. Speirs, D. Maddox [O. E. Sell, Agronomy and K. T. Holley, Chemistry] (Purnell).

Variations in the composition and nutritive value of vegetables grown in the South, 6/18/38, L. Ascham, M. Spiers [H. L. Cochran and J. E. Bailey, Horticulture and K. T. Holley, Chemistry] (Purnell) (Regional Cooperative—South).

#### II.

Progress report in Georgia Sta. Rpt. 1937, pp. 51, 52.

The availability of iron in various foods, L. Ascham, M. Speirs, and D. Haddox. Jour. Nutr., 16 (1938), No. 5 (Nov.).

# HAWAII

I.

Anemia studies: The relation of blood constituents and blood-forming organs in nutritional anemia, 6/20/35, [C. J. Hamre, Zoology] and C. D. Miller (Adams and Territorial).

The available iron of Hawaiian vegetables, 7/27/38, C. D. Miller and L. Louis (Adams).

Total family expenditures, total cost of food, adequacy of diets and the physical and dental status of children of various groups of people in Hawaii, rev. 7/27/38, M. Potgieter and T. Takase (Purnell).

Food customs and preparation of characteristic dishes of racial groups in Hawaii, K. Bazore (Departmental).

# HAWAII (Cont.)

I.

A study of the nutritive value of foodstuffs in Hawaii by means of chemical analyses and biological experiments, C. D. Miller, L. Louis, K. Yanazawa, and T. Takase (Hatch and Territorial).

II.

Progress report in Hawaii Sta. Rpt. 1937, pp. 60-64.

#### IDAHO

I.

The vitamin G content of the Idaho Russet Burbank potato, 3/1/32, E. Woods (Purnell).

The ascorbic acid metabolism of college students, 6/14/38, E. Woods (Regional Cooperative-Northwest) (Purnell),

The vitamin A content of pasture plants under pasture conditions, 12/6/32, reopened 1935-36, E. Woods and [D. R. Thoophilus, Dairy Husbandry] (Purnell).

The vitamin E content of pea germ meal, 1/24/36, [A. O. Shaw and D. L. Fourt, Dairy Husbandry] and E. Woods (Purnell).

The biological value of the protein of field peas and the effect of heat treatment on pea protein, 4/8/37, [W. M. Peeson, Animal Husbandry], E. Woods and [D. W. Bolin, Agricultural Chemistry] (Purnell).

·II.

Progress report in Idaho Sta. Bul. 222 (1938), pp. 48-50.

# ILLIMOIS

I.

The factors that influence bone calcification.--I, The role of lactose in mineral metabolism, 2/2/32, J. Outhouse, E. Kempster, and M. Bernds (Purnell).

llineral requirements of human subjects and the utilization of minerals of foods, 9/1/36, J. Outhouse, E. Kempster, and M. Bernds (Purnell).

Characteristics of starches of wheats and of other sources, 7/0/31, S. Woodruff and M. MacMasters (Purnell).

Soybeans and soybean products as human food. Protein and carbohydrate fractions of soybeans, 1/4/35, S. Woodruff, H. Klaas, and I. A. Fisher (Purnell and Bankhead-Jones).

The utilization of frozen meats, 10/16/37, [S. Bull, Animal Husbandry] S. Woodruff and E. Rogosheski (Purnell).

Home preservation of foods. A. Problems in freezing and using vegetables and fruits. B. A study of the soundness of home canning methods, 6/14/38, S. Woodruff, H. Klaas and [B. L. Weaver, Horticulture, and F. W. Tanner, Bacteriology] (Bankhead-Jones and State).

# ILLINOIS (Cont.)

I.

Hemicelluloses and the softening of vegetables and fruits, 7/18/38, S. Woodruff and M. MacMasters (Purnell).

Illinois farm home accounts, 4/7/28, R. C. Freeman (Purnell). Consumption studies in rural families, 2/26/36, L. Bane and R. C. Freeman (Bankhead-Jones).

Study of the use of income of farmers, 7/9/36, [H. C. M. Case and D. E. Lindstrom, Agr. Economics] and L. Bane (Bankhead-Jones).

A study to determine the major causes of fatigue in the home laundering process and to explore possible methods for studying problems of fatigue in household work, 10/5/38, L. Bane and [E. W. Lehmann, Agricultural Engineering (Purnell).

#### II.

A study of soybean varieties with reference to their use as food, S. Woodruff and H. Klaas. Illinois Sta. Bul. 443 (1938), pp. 421-467.

Gelatinization and retrogradation changes in corn and wheat starches shown by photomicrographs, S. L. Woodruff and M. M. MacMasters. Illinois Sta. Bul. 445 (1938), pp. 43.

Edible varieties of soybeans, S. Woodruff. Proc. Amer. Soybean Assoc., 17 (1937), pp. 19-22.

Soybean products as competitors of the dairy industry, S. Woodruff. Dairy Manfrs. Short Course Manual (Univ. Ill. Dept. Dairy Husb.) (1937), pp. 186-188.

Buying household goods by contract, L. Bane and R. C. Freeman. Jour. Home Econ., 29 (1937), pp. 598-602.

The relative effects of certain saccharides and of vitamin D on mineral metabolism of rats, J. Outhouse, J. Smith, and I. Twomey. Jour. Nutr., 15 (1938), pp. 257-263.

Control feeding technic in bone calcification studies, J. Outhouse, J. Smith, and L. Merritt. Jour. Nutr., 14 (1937), pp. 567-577.

A comparative study of the growth-promoting and bone-calcifying effects of several carbohydrates, J. Outhouse, J. Smith, L. Merritt, and F. R. White. Jour. Nutr., 14 (1937), pp. 579-595.

The calcium requirements of pre-school children and their utilization of the calcium of milk, E. Jensen, D. Sheldon, M. Bernds, G. Kinsman, and J. Outhouse. Abs. in Jour. Home Econ., 30 (1938), p. 584.

#### INDIANA

I.

A study of the relation between color, composition, culinary qualities, and marketing value of Indiana potatoes grown on muck and other soil types [Horticulture] 1/18/34, G. Reäfield.

Refrigeration for the farm household and farm produce, 7/9/35, G. Redfield (Purnell and Supplemental).

# INDIANA (Cont.)

Ī.

A study of small electric mixers and beaters for household use, 4/8/37, G. Redfield (Purnell).

A study of hydrogenated lard (produced under known conditions) as a culinary fat, R. Jordan (State).

Further studies on the activity of fluorides, C. Schuck (State).

The effect of anti-oxidants upon deterioration and color fastness of cotton fabrics, M. Griffith (Industrial Fellowship).

II.

Progress report in Indiana Sta. Rpt. 1937, pp. 63-66.

#### IOWA

I.

A study of the conditions influencing the production of uniform experimental animals in the stock colony, 10/24/31, P. M. Nelson, P. Swanson, E. B. Wilcox, and M. Greenwood (Purnell).

Stock colony studies. -- IV, Factors influencing the concentration of hemoglobin in the blood of the albino rat, P. Swanson and A. Graham (Departmental).

The biological value of autoclaved pork muscle, 8/8/36, P. P. Swanson,

P. M. Nelson, M. Greenwood, E. B. Wilcox, and M. Gunson (Purnell).

Dietary factors in the production and cure of toxemic pregnancies induced by the feeding of certain pork diets, 8/8/36, P. P. Swanson, P. M. Nelson, E. B. Vilcox, M. Greenwood, H. E. Farrankop, W. Armstrong, and M. Gunson [E. Smith, Zoology and H. D. Bergman, Veterinary Physiology] (Purnell and State).

Distribution of fat in livers of pregnant rats toxemic on day of parturi-

tion, 9/15/37, E. Wilcox and P. Swanson (State and Departmental).

Glycogen content of livers of pregnant rats toxemic on day of parturition,

9/15/37, P. Swanson and H. Farrankop (State and Departmental).

Reproductive failure and associated pathological changes occurring in female albino rats fed a diet containing dried autoclaved pork muscle, W. Armstrong and P. Swanson (State and Departmental).

The lactogogue factor in liver and beef muscle, 8/8/36, P. P. Swanson, P. M. Nelson, E. B. Wilcox, W. Armstrong, H. E. Farrankop, and M. Gunson

(Purnell and State).

The nutritional status of college women as related to their dietary habits; anthropometric measurements, the formed elements of the blood, basal metabolism, and dietary balances, 8/8/36, P. M. Nelson, P. P. Swanson, M. A. Ohlson, and V. Minnick [E. Smith, Zoology; S. B. Kalar, J. G. Grant, C. Young, and J. F. Edwards, Hygiene; and P. C. Jeans and G. Stearns, Pediatrics, University of Iowa] (Purnell and State).

Palatability studies of poultry, P. M. Nelson, B. Lowe, and K. Hoffman

[H. L. Wilcke, Animal Husbandry] (State).

The influence of low temperatures upon beef and pork held in storage for different levels [F. J. Beard, Animal Husbandry] P. M. Nelson and B. Lowe and [H. L. Foust, Veterinary Anatomy] (State and General Electric).

Testing soybean selections suitable for use as green vegetables for human consumption, C. P. Wilsie, P. M. Nelson, B. Lowe, E. S. Hober, M. Weiss, and C. B. Judny (State).

# IOWA (Cont.)

I.

The comparative degradation of cotton cellulose and regenerated cellulose rayon by five oxidizing bleaches, 8/5/37, R. Edgar (Purnell and State). The protection from degradation which certain finishes provide wool,

R. Edgar and R. Donohue (State).

Four hundred woven fabrics, 2/16/38, R. Edgar (State).

Comparative degradation of fabrics by commercial institutional and home laundering methods, 1/20/37, L. Peet and R. Edgar (State).

Performance of certain ice refrigerators when operated under controlled conditions, L. J. Peet, V. Berry, with B. Lowe [L. A. Richards and J. V. Atanasoff, Physics] (National Ice Institute).

Efficiency and utility of certain small appliances, L. J. Peet and F. M. Madden, with P. M. Nelson [M. S. Cover, Electrical Engineering, and L. A. Richards and J. V. Atanasoff, Physics] (State).

The operating efficiency of small electrical food mixers, L. J. Peet and

F. M. Madden, with B. Lowe and [E. C. McCracken, Physics] (State).

Analysis of price information useful to consumers in purchasing, 8/5/37, M. G. Reed and E. Hoyt [G. Tintner and I. W. Arthur, Agricultural Economics] (Purnell and State).

#### II.

Progress report in Iowa Sta. Rpt. 1937, pt. 1, pp. 129, 160-173.

Oxidative degradation of silk, II, M. Lichte and R. Edgar. Iowa State

Col. Jour. Sci., 12 (1937), pp. 1-4.

The nutritional status of college women, P. M. Nelson. Jour. Home

Econ., 30 (1938), pp. 465, 466.

A method of increasing precision in vitamin A assay, P. P. Swanson, G. T. Stevenson, and P. M. Nelson. Jour. Nutr., 15 (1938). pp. 103-123.

Toxemic pregnancy in the rat, P. P. Swanson and P. M. Nelson. Abs. in Jour. Nutr., 15 (1938), p. 19.

#### KANSAS

I.

The vitamin content of foods in relation to human nutrition. 2. Determination of the vitamin content of foods, rev. 7/11/38. Phase J. A study of the vitamin H content of the colostrum and milk of the dairy cow. Phase K. A study of the vitamin A value of liver, M. M. Kramer, P. Nutter, and B. L. Kunerth (Purnell).

A study of factors affecting the service qualities of certain textile fabrics, rev. 6/3/38. 4. A study of certain qualities of fabrics with regard to adequate labeling. Phase D. Adequacy of labeling of textile fabrics with regard to fiber content, K. Hess and H. Fletcher (Purnell).

# KANSAS (Cont.)

I.

The effect upon the animal body of varying the amount of vitamin in the diet.—1, The effect upon the animal body of varying the amount of vitamin C in the diet, with special reference to reproduction and the development of the embryo, 4/6/32, M. M. Kramer and [M. T. Harman, Zoology] (Purnell).

Studies of factors affecting the expenditures for family living by Kansas farm families, 7/12/35, M. A. Gunselman and [W. E. Grimes, Agricultural Economics] (Purnell).

The nutritional stauts of college women as related to their dietary habits, 9/9/36, (Regional Cooperative-North Central) (Purnell).

I. A study of the anthropometric measurements of college women in Kansas,

- M. S. Pittman, B. L. Kunerth, D. Cedarquist, P. Nutter, and E. J. Meiller.
  - 2. A study of the basal metabolism of women of college age in Kansas,
- M. S. Pittman, B. L. Kunerth, D. Cedarquist, and P. Nutter.
- 3. A study of the blood picture of college women in Kansas, M. S. Pittman,

B. L. Kunerth, and D. Cedarquist.

- 4. A study of the intake and utilization of the food of a selected group of Kansas college women, M. S. Pittman, B. L. Kunerth, and D. Cedarquist.
- 5. A survey study of the dietary habits of Kansas college women, M. S. Pittman, B. L. Kunerth, and D. Cedarquist.

# II.

Vitamins in common foods, M. M. Kramer and B. L. kunerth. Kans. State Col. Bul., 21 (1937), pp. 28.

Vitamin A and carotene determinations on a sample of commercial butter, B. L. Kunerth and E. Leuschen. Kans. Acad. Sci. Trans., 39 (1936), pp. 191-195.

Fat as a factor in palatability of beef, D. L. MacIntosh and J. L. Hall.

Kans. Acad. Sci. Trans., 39 (1936), pp. 53-58.

Composition of certain beef cuts as affected by grade, location in cut, and method of cooking, M. Rogers, I. Gillum, B. L. Kunerth, and M. S. Pittman. Jour. Amer. Dietet. Assoc., 13 (1937), pp. 320-324.

Some data on the composition of cooked beef rib roasts, A. Brill, B. L. Kunerth, and M. S. Pittman. Jour. Amer. Dietet. Assoc., 13 (1937), pp. 382-384.

Some observations pertaining to tenderness of meat, D. L. MacIntosh, J. L. Hall, and G. E. Vail. Amer. Soc. Anim. Prod. Proc., 29 (1936), pp. 285-289.

Animal products as sources of protein, calcium, and phosphorus in the human diet, M. M. Kramer and I. Gillum. Jour. Amer. Dietet. Assoc., 14 (1938), pp. 256-260.

Recovery of carotene and vitamin A from butter when cows were fed unlimited quantities of green rye, F. W. Atkeson, J. S. Hughes, B. L. Kunerth, W. J. Peterson, and M. M. Kramer. Jour. Nutr., 14 (1937), pp. 621-629.

Some observations on the vitamin A value of butter produced under drought conditions, B. L. Kunerth and W. H. Riddell. Jour. Dairy Sci., 21 (1938), pp. 41-44.

The vitamin A value of colostrum and milk of four cows determined by the single feeding method, M. M. Kramer, M. D. Bair, B. L. Kunerth, and W. H. Riddell. Jour. Agr. Res. [U. S.], 56 (1938), pp. 227-232.

#### KANSAS

# II. (Cont.)

Vitamin G (riboflavin) content of colostrum and milk of cows determined biologically, M. M, Kramer, I. Gardner, B. L. Kunerth, and W. H. Riddell. Jour. Agr. Res. [U. S.], 56 (1938), pp. 233-238.

Lack of vitamin C in the diet and its effect on the jaw bones of guinea pigs, M. T. Harman, M. M. Kramer, and H. D. Kirgis. Jour. Nutr., 15 (1938), pp. 277-284.

# KENTUCKY

I.

The relationship of certain constituents of egg yolks and hemoglobin regeneration in humans, 6/16/36, S. E. Erikson and R. Boyden and W. M. Insko and J. H. Martin, Poultry Husbandry] (Purnell).

An investigation of the metabolism of obesity, 10/20/25, S. E. Erikson and R. Boyden (Furnell).

# II.

Progress report in Kentucky Sta. Rpt. 1937, pt. 1, p. 43.

Phosphorus content of the yolk of fresh and storage eggs, S. E. Erikson, R. E. Boyden, W. M. Insko, and J. H. Martin. Kentucky Sta. Bul. 378 (1938), pp. 24.

Calcium content of the yolk of fresh and storage eggs, S. E. Erikson, R. E. Boyden, W. M. Insko, and J. H. Martin. Kentucky Sta. Bul. 382 (1938), pp. 20.

#### MAINE

I.

The relation of the dietary habits and food resources of Maine people to their state of nutrition with respect to vitamin C, 9/21/37, M. M. Clayton and P. S. Greene (Regional Cooperative-Northeast) (Purnell, Hatch, and State).

A study of the financing by Maine families of higher education of their children in Maine institutions, 7/13/33, P. S. Greene (Purnell, Hatch, and State).

The factors affecting the cooking quality of potatoes, rev. 8/29/32, (2) The relation of internal composition and physical structure of the potato to mealiness, M. D. Sweetman and P. S. Greene (Purnell, Hatch, and State).

The economic utilization of electricity in food preparation in Maine rural homes, rev. 10/20/36, (3) The effect of the method of heat application and accompanying oven conditions on flavor and texture of baked foods, M. M. Monroe and P. S. Greene (Purnell, Hatch, and State).

The economical management of kerosene cook stoves to secure palatability of product in Maine farm households, M. M. Monroe (State).

A study of the performance of the wood range heated by distillate burner and an evaluation of certain factors which affect its performance, M. M. Monroe (State).

#### MAINE

II.

Progress report in Maine Sta. Bul. 387 (1937), pp. 195-201, 207-211.

# MASSACHUSETTS

I.

Methods and criteria for detecting nutritional disturbances.—A study of the cause and control of nutritional cataract, 3/6/35, H. S. Mitchell and G. M. Cook (Purnell and other).

A study of the nutrition of college women with respect to vitamin C requirements, 10/17/36, H. S. Mitchell and C. A. Merriam (Regional project, Northeastern States) (Purnell and State).

[Fundamental nutritive properties of apples and apple products, 3/14/34,

C. R. Fellers and A. S. Levine, Horticulture Manufactures] (Purnell).

Nutritive value of cranberries, 7/6/26, C. R. Fellers and A. S. Levine (Purnell).

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